

Claims

1. Protector for the protection of pressure-sensitive, contact-sensitive or injured points of the human body when using a belt worn on the body such as e.g. a seatbelt of a vehicle, whereby the protector has a side toward the user and an upper side away from the user, characterized in that the upper side (24) is a surface that is uninterrupted by protrusions or edges.
2. Protector as in claim 1, characterized in that the upper side (24) is not interrupted by guiding or fastening means for a belt.
3. Protector as in claim 1 or 2, characterized in that the upper side (24) extends essentially over the entire length (L) of the protector (1).
4. Protector as in one or several of the claims 1 to 3, characterized in that the upper side (24) constitutes the bearing surface for a belt.
5. Protector as in one or several of the claims 1 to 4, characterized in that the protector (1) consists of a basic body (2) and a cover (3) bearing the upper side (24).
6. Protector as in claim 5, characterized in that the cover (3), the fastening means (6) to fasten the protector (1) to a belt, the fastening means (6) of

the cover (3) or the edges (25) of the basic body (2) of the protector (1) are covered in such manner that the protector (1) does not present any danger to the functioning of an opening or opened airbag in case of impact with it.

7. Protector as in one or several of the claims 1 to 6, characterized in that the upper side (24) does not have any components protruding beyond the upper side (24).
8. Protector as in one or several of the claims 1 to 7, characterized in that the upper side (24) is curved in the direction of the course (G) of the belt.
9. Protector as in one or several of the claims 1 to 8, characterized in that the upper side (24) of the cover (3) at a right angle to the course (G) of the belt is essentially not curved.
10. Protector as in one or several of the claims 1 to 8, characterized in that the upper side (24) is at least partially convex.
11. Protector as in one or several of the claims 5 to 10, characterized in that the protector (1) guides a belt by means of its basic body (2) over the point of the body to be protected and in that the cover (3) comprises a belt between itself and the basic body (2).

12. Protector as in one or several of the claims 5 to 11, characterized in that the cover (3) is at least partially movable relative to the basic body (2).
13. Protector as in one or several of the claims 5 to 12, characterized in that the cover (3) can be swiveled at least partially relative to the basic body (2).
14. Protector as in one or several of the claims 5 to 13, characterized in that the cover (3) is made in form of a guide (7) for the belt.
15. Protector as in one or several of the claims 5 to 14, characterized in that the cover (3) can be at least partially removed from the basic body (2).
16. Protector as in one or several of the claims 5 to 15, characterized in that a distance exists between the basic body (2) and the cover (3), making it possible for the belt to shift in a braked manner on the basic body (2).
17. Protector as in claim 16, characterized in that the distance is designed so that the belt is in contact simultaneously with the basic body (2) and with the cover (3) in order to produce a frictional resistance.

18. Protector as in claim 16 or 17, characterized in that the distance between the basic body (2) and the cover (3), in particular as seen at a right angle to the belt, has a value of less than 2 mm at least at some points.
19. Protector as in claim 18, characterized in that the distance measures less than 1.5 mm, preferably less than 1.3 mm.
20. Protector as in one or several of the claims 5 to 19, claim characterized in that a tappet or ridge is formed on the cover (3) and/or the basic body (2), constituting together with the basic body (2) the shortest distance between the cover (3) and the basic body (2).
21. Protector as in one or several of the claims 1 to 20, characterized in that the protector is provided with supporting surfaces (21) on the side towards the body, by means of which it lies on the body of a user.
22. Protector as in claim 21, characterized in that at least one of the supporting surfaces (21) is provided with a coating (22) which is rubber-like in order to achieve an attenuating effect.
23. Protector as in claim 21 or 22, characterized in that the supporting surface (21) is provided with a coating to increase friction between the protector (1) and the body.

24. Protector as in one or several of the claims 21 to 23, characterized in that the protector (1) leads over a point of the body to be protected in the manner of a bridge between the supporting surfaces (21).
25. Protector as in one or several of the claims 21 to 24, characterized in that the change-over (8) between the bridge-like part (81) and the supporting surface (21) is rounded off.
26. Protector as in claim 25, characterized in that the change-over (8) is designed with a radius of at least 0.5 mm, preferably at least 1.5 mm.
27. Protector as in one or several of the claims 5 to 26, characterized in that the cover (3) has a lateral opening located in the plane of the belt and designed so that it can be closed.
28. Protector as in one or several of the claims 5 to 27, characterized in that the cover (3) and/or the basic body (2) are provided with a coating increasing friction between protector (1) and belt on their side toward the belt.

29. Protector as in claim 28, characterized in that the frictional value achieved thereby between belt and protector (1) prevents free shifting, e.g. caused by gravity, of the protector (1) on the belt.
30. Protector as in one or several of the claims 5 to 29, characterized in that the cover (3) is installed so as to be capable of being shifted on the basic body (1).
31. Protector as in one or several of the claims 1 to 30, characterized in that the cover (3) is installed so that it can be swiveled on the basic body (2) essentially in a direction perpendicular to the belt.
32. Protector as in one or several of the claims 4 to 31, characterized in that the cover (3) is made in one piece with the basic body (2).
33. Protector as in one or several of the claims 4 to 32, characterized in that the cover (3) forms a snap-in connection with the basic body (2).
34. Protector as in one or several of the claims 5 to 33, characterized in that the cover (3) reaches around the basic body (2) in order to attach the cover (3) on the basic body (2).

35. Protector as in one or several of the claims 5 to 34, characterized in that the cover (3) is made in several parts, whereby one part is connected to the basic body (2) in such manner that it cannot be removed and the other part can be removed or swiveled away from the first part of the cover (3) or from the basic body (2) for the introduction of the belt.
36. Protector as in one or several of the claims 5 to 35, characterized in that the cover (3) is provided with one or several contact surfaces (9) at a right angle to the running direction of the belt for the lateral guidance of the belt.
37. Protector as in one or several of the claims 5 to 36, characterized in that the upper side (240) of the basic body (2) which is toward the belt is a curved even surface.
38. Protector as in one or several of the claims 1 to 37, characterized in that the areas of the basic body (2) which are not covered by the cover (3) are rounded off.